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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,812	01/30/2001	Kuniyuki Kajita	L9289.01107PCT	4608

7590 09/15/2004

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1615 L Street NW  
Washington, DC 20036

EXAMINER
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PEZZLO, JOHN

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/744,812

Applicant(s)

KAJITA ET AL.

Examiner

John Pezzlo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/30/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3, 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

I. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Tong et al. (US 6,732,316 B1) hereinafter Tong.

1. Regarding claims 1 and 6-10 – Tong discloses a method and device (apparatus) which is part of a CDMA wireless communication system comprising a terminal and a base station, refer to the abstract and Figure 1 and column 1 lines 10 to 30. Tong discloses an interleaver for implementing a multi-stage block interleaver (MIL) for use in third generation CDMA, refer to Figure 1 and column 1 lines 20 to 50. Tong discloses that CDMA wireless system would have a restorer (deinterleaver) with the same structure for recovering the original data at both the terminal and the base station, as claimed in claim 10, refer to column 7 lines 20 to 27.

Tong discloses conversion series creating means for creating at least one sequence conversion series using at least one element included in a sequence conversion rule expression

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stipulated for every input data item, refer to Figure 1 item 28 and Figure 2 and column 3 line 34 to column 6 line 25 (linear congruential rules and column and row matrixes).

Tong discloses sequence changing means for changing the sequence of the input data using the created sequence conversion series, refer to Figure 2 and column 6 line 25 to column 7 line 20.

2. Regarding claim 2 – Tong discloses wherein the sequence changing means further comprises a first sequence calculating means for calculating the sequence of the changed sequence of the input data and changes the sequence of the input data according to the calculated sequence, refer to Figure 1 item 28 and Figure 2 and column 3 line 34 to column 6 line 25.

3. Regarding claim 3 – Tong discloses wherein the sequence changing means further comprises a second sequence calculating means for calculating the sequence of the input data to be placed in this input data and changes the sequence of the input data according to the calculated sequence, refer to Figure 1 item 28 and Figure 2 and column 3 line 34 to column 6 line 25.

4. Regarding claim 4 – Tong discloses wherein the conversion series creating means creates a sequence conversion series, when one element included in the sequence conversion rule expression is lower than the other element included in the expression by at least 1 stage, using the other element, refer to Figure 1 item 28 and Figure 2 and column 3 line 34 to column 6 line 25.

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5. Regarding claim 5 – Tong discloses wherein the sequence changing means changes the sequence of the input data whose sequence has been changed according to the sequence conversion rule expression, refer to Figure 2 and column 6 line 25 to column 7 line 20.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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1. Tong et al. (US 6,684,361 B2) discloses a data interleaver and method of interleaving data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

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or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Jefferson Building


500 Dulany Street

Alexandria, VA.

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John Pezzlo

13 September 2004



**JOHN PEZZLO**  
**PRIMARY EXAMINER**